

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of inhibiting growth and reproduction of microorganisms in a cooling water system used in an industrial process, comprising the steps of:
 - a) providing cooling water;
 - b) adding an effective amount of deactivatable biocide to the cooling water; and
 - c) adding an effective amount of a neutralizing agent to the cooling water to irreversibly deactivate the biocide before or upon disposal of the cooling water,
such that after the neutralizing agent is added, the cooling water supports visible growth of microorganisms in less than 10 days when exposed to a certified inoculum, growth media, and rapidly biodegradable substance under ambient conditions,
wherein the biocide is an aldehyde and the neutralizing agent is a nitrogen-containing compound selected from the group consisting of primary amines, secondary amines, ammonia, amino alcohols, and mixtures thereof or the biocide is an alkyne and the neutralizing agent is a hydrogenation catalyst and H₂.
2. (Original) A method according to claim 1, wherein the biocide is added in an amount of at least 1 ppm.
3. (Original) A method according to claim 1, wherein the biocide is added in an amount of at least 10 ppm.
4. (Original) A method according to claim 1, wherein the biocide is added in an amount of at least 100 ppm.

5. (Previously presented) A method according to claim 1, further comprising a step (d) releasing the cooling water into a natural environment after the biocide has been irreversibly deactivated.
6. (Original) A method according to claim 1, further comprising a step (d) discharging the cooling water into a biological oxidation facility.
7. (Canceled)
8. (Canceled)
9. (Currently amended) A method according to claim [[7]] 1, wherein the biocide is glutaraldehyde and the nitrogen-containing compound is selected from the group consisting of monethanolamine, diethanolamine, methyldiethanolamine, and diethylamine.
10. (Canceled)
11. (Original) A method according to claim 1, wherein after the neutralizing agent is added, the cooling water supports visible growth of microorganisms in less than 5 days when exposed to a certified inoculum, growth media, and rapidly biodegradable substance under ambient conditions.
12. (Currently amended) A method of inhibiting growth and reproduction of microorganisms in a cooling water system for a Fischer Tropsch facility, comprising the steps of:
 - a) providing cooling water;
 - b) performing a Fischer-Tropsch synthesis process;

- c) isolating Fischer-Tropsch-derived liquid products from the Fischer-Tropsch process;
- d) isolating Fischer-Tropsch derived deactivatable biocides from the Fischer-Tropsch process;
- e) adding an effective amount of the Fischer-Tropsch derived deactivatable biocide to the cooling water; and
- f) adding an effective amount of a neutralizing agent to the cooling water to irreversibly deactivate the biocide before or upon disposal of the cooling water, such that after the neutralizing agent is added, the cooling water supports visible growth of microorganisms in less than 10 days when exposed to a certified inoculum, growth media, and rapidly biodegradable substance under ambient conditions.

wherein the Fischer-Tropsch derived deactivatable biocide is an aldehyde and the neutralizing agent is a nitrogen-containing compound selected from the group consisting of primary amines, secondary amines, ammonia, amino alcohols, and mixtures thereof, or the Fischer-Tropsch derived deactivatable biocide biocide is an alkyne and the neutralizing agent is a hydrogenation catalyst and H₂.

13. (Original) A method according to claim 1, wherein the biocide is added in an amount of at least 100 ppm.
14. (Previously presented) A method according to claim 12, further comprising a step (g) releasing the cooling water into a natural environment after the biocide has been irreversibly deactivated.
15. (Original) A method according to claim 12, further comprising a step (g) discharging the cooling water into a biological oxidation facility.

16. (Original) A method according to claim 12, wherein the biocide is glutaraldehyde and the nitrogen-containing compound is selected from the group consisting of monethanolamine, diethanolamine, methyldiethanolamine, and diethylamine.
17. (Original) A method according to claim 12, wherein the cooling water supports growth of microorganisms in less than 5 days after adding the neutralizing agent under ambient conditions when exposed to a certified inoculum, growth media, and a hydrocarbonaceous product.
18. (Cancelled)
19. (Original) A method according to claim 12, wherein the Fischer-Tropsch derived deactivatable biocides are isolated by distillation or chromatographic separation.
20. (Currently amended) A method of inhibiting growth and reproduction of microorganisms in a cooling water system for a Fischer Tropsch facility, comprising the steps of:
 - a) providing cooling water;
 - b) performing a Fischer-Tropsch synthesis process to provide a product stream;
 - c) fractionally distilling the product stream and isolating liquid hydrocarbonaceous products and oxygenates;
 - d) subjecting the oxygenates to oxidation to form aldehydes;
 - e) adding an effective amount of the aldehydes to the cooling water to resist visible growth for at least 10 days under ambient conditions when exposed to a certified inoculant; and
 - f) adding an effective amount of a neutralizing agent, wherein the neutralizing agent is a nitrogen-containing compound selected from the group consisting of primary amines, secondary amines, ammonia, amino alcohols, and mixtures thereof, to the cooling water to irreversibly deactivate the aldehydes before or upon disposal of the cooling water, such that after the neutralizing agent is

added, the cooling water supports visible growth of microorganisms in less than 10 days when exposed to a certified inoculum, growth media, and rapidly biodegradable substance under ambient conditions.

21. (Currently amended) A method according to claim 20, wherein the biocide is aldehydes are added in an amount of at least 100 ppm.
22. (Currently amended) A method according to claim 20, wherein the biocide is aldehydes are glutaraldehyde and the neutralizing agent is selected from the group consisting of monethanolamine, diethanolamine, methyldiethanolamine, and diethylamine.
23. (Original) A method according to claim 20, wherein the oxygenates are isolated from light Fischer Tropsch products.
24. (Currently amended) A method of inhibiting growth and reproduction of microorganisms in a cooling water system for a Fischer Tropsch facility, comprising the steps of:
 - a) providing cooling water;
 - b) performing a Fischer-Tropsch synthesis process to provide a product stream;
 - c) fractionally distilling the product stream and isolating liquid hydrocarbonaceous products and olefins;
 - d) subjecting the olefins to dehydrogenation to form alkynes;
 - e) adding an effective amount of the alkynes to the cooling water to resist visible growth for at least 10 days under ambient conditions when exposed to a certified inoculant; and
 - f) adding an effective amount of a neutralizing agent, wherein the neutralizing agent is a hydrogenation catalyst and H₂, to the cooling water to irreversibly deactivate the alkynes before or upon disposal of the cooling water, such that after the neutralizing agent is added, the cooling water supports visible growth

of microorganisms in less than 10 days when exposed to a certified inoculum,
growth media, and rapidly biodegradable substance under ambient conditions.

25. (Currently amended) A method according to claim 24, wherein the biocide is alkynes are added in an amount of at least 100 ppm.
26. (Original) A method according to claim 24, wherein the alkynes are primary alkynes and the neutralizing agent is a hydrogenation catalyst and H₂.
27. (Currently amended) A method according to claim 24, wherein the olefins are formed from a thermal cracking process which uses a heavy Fischer Tropsh Tropsch feed derived from a Fischer Tropsch process.
28. (Original) A method according to claim 24, wherein the olefins are isolated from light Fischer Tropsch products.